Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Dayton® Propane Patio Heaters

Description

This is a propane patio heater. It is intended for the heating of outdoor patios, decks, spas, pool and open working areas. LP cylinder is not included.

Figure 1 - 1TGP7 Stainless Steel Deluxe Propane Patio Heater

Dimensions

Model	Unit Net Weight	Diameter	Height
1TGP7	59 lbs	32 5/16”	7’4” (88”)
1TGP8	59 lbs	32 5/16”	7’4” (88”)
1TGP9	59 lbs	32 5/16”	7’4” (88”)

C US

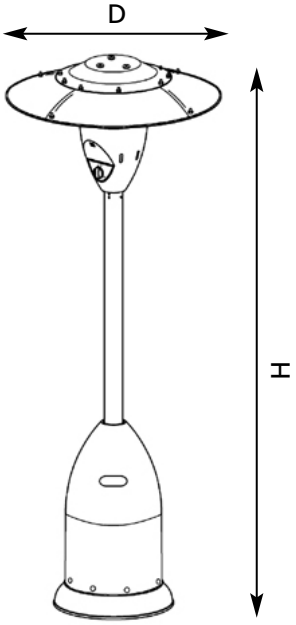

Figure 2 - Dimensions

Specifications

Model	Finish / Head Design	Fuel	Supply Pressure	Manifold Pressure	Heat Output
1TGP7	Stainless Steel / Deluxe	Propane LP	Max 150 PSI, Min 5 PSI	11 inches W.C.	40,000 BTU/Hr
1TGP8	Copper / Deluxe	Propane LP	Max 150 PSI, Min 5 PSI	11 inches W.C.	40,000 BTU/Hr
1TGP9	Powder Coated Black / Deluxe	Propane LP	Max 150 PSI, Min 5 PSI	11 inches W.C.	40,000 BTU/Hr

Form 5S5685

Printed in Korea
09663
0307/036/VCPVP

PIN018
03/07

Dayton® Propane Patio Heaters

Unpacking

Remove the heater and all of its packaging materials form the shipping carton.

NOTE: Save the box and packaging materials for future use.

General Safety Information

⚠WARNING ***Do not operate this heater until you have read, and thoroughly understand these safety and operating instructions. Failure to comply with the precautions and instructions provided with this heater can result in death, serious bodily injury, property loss or damage from the hazards of fire, explosion, burns, or electric shock. Only persons who can read and understand these instructions should use or service this heater. Not for residential, household or recreational vehicle use. Please read this manual***

⚠WARNING ***Proposition 65 warning: Fuels used in gas, wood burning or oil-fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.***

⚠WARNING ***FIRE, BURN, INHALATION AND EXPLOSION HAZARD***

1. Keep solid combustibles, such as building materials, paper or cardboard a safe distance away from the heater as recommended by the instructions in this manual (at least 2 feet away from sides and 3 feet from top of head assembly. See Figure 13 on Page 5).

⚠CAUTION ***NEVER use the heater in locations which do or may contain volatile or airborne combustibles, or products such as gasoline, solvents, paint thinner, dust particles or unknown chemicals.***

2. These heaters are design certified as gas-fired infrared patio heaters under CSA 2901-81 standards.
3. This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Do not move heater when in use OR for at least 45 minutes after using.
4. Keep combustible materials, such as furniture, pillow, bedding, papers, clothes and curtains at least 2 feet away from sides and 3 feet from top of head assembly. (see Figure 13 on page 5).

⚠CAUTION ***Never let children operate or allow near any heater. Never leave heater operating and unattended.***

⚠WARNING ***Always turn off heater at control knob and then close LP cylinder when not in use.***

5. Do not operate any heater with a damaged regulator or after the heater malfunctions, or has been dropped or damaged in any manner. Return heater to an authorized service facility for examination, or mechanical adjustment, or repair.
6. Do not use this heater in a residential or household area. For OUTDOOR use only. If stored indoors, detach and leave the LP cylinder outdoors.
7. Never replace the regulator with any regulator other than the factory suggested replacement.
8. This heater should be secured or moved inside if winds exceed 22 miles per hour to prevent damage to heater.
9. Do not insert or allow any foreign objects to enter any ventilation or exhaust opening as this may cause a fire, or damage to the heater.
10. Do not paint emtter screen, control panel or reflector assembly.
11. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause a fire or injury to persons.
12. Be sure heater is used where fresh air ventilation is available.
13. Do not modify or alter this heater in any way or operate any heater that has been modified from its original state. For example, do not use heater without reflector assembly or emitter screen.
14. It is hard to anticipate every use which may be made of the heater. Check with your local fire safety authority if you have any questions about heater application.
15. Be sure heater is on a solid and level surface.
16. Do not shorten the burner post assembly.

Features

The Dayton Propane Patio Heaters come with safety features including anti-tilt switch and auto shutoff switch. The features of the Dayton Propane Patio Heaters are shown in Figure 3 on page 3.

Models 1TGP7, 1TGP8 and 1TGP9

Features (Continued)

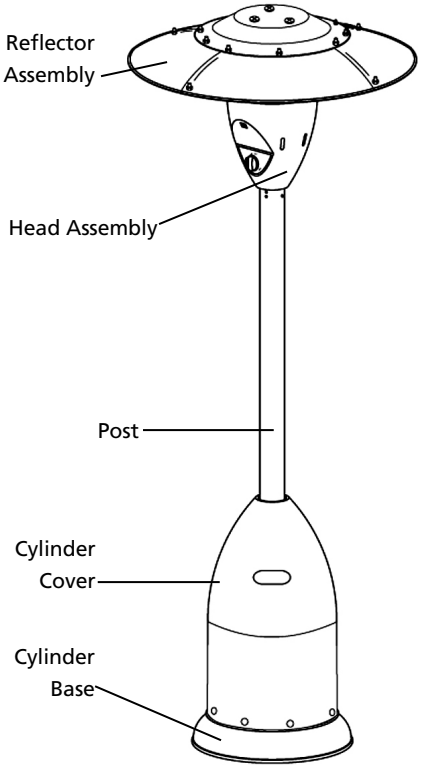

Figure 3 – Features

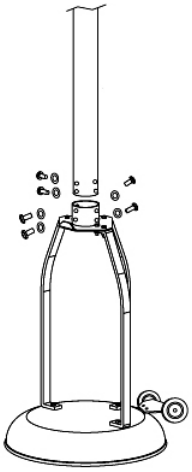

Figure 4 – Attaching post to base assembly.

Assembly

ASSEMBLING THE HEATER

TOOLS REQUIRED

7/16” Wrench

3/8” Open End Wrench

Adjustable Opening Wrench, 8” Long

Phillips Head Screwdriver

Leak Detection Solution (Instructions how to make solution are included in Step 8).

STEP 1 - ATTACH POST TO BASE ASSEMBLY

Attach the Post to the post mounts (Figure 4) using M5 x 8 Bolts (6 pcs) and 5mm Washers (6 pcs).

STEP 2 - ATTACH CYLINDER COVER

Attach the Cylinder Cover to the post mounts (Figure 5).

STEP 3 - ATTACH HEAD ASSEMBLY TO POST

Load Head Assembly by inserting Gas Hose into Post.

Insert Head Assembly into Post (Figure 6).

Tighten securely using M4 x 8 Bolts (5 pcs) and 4mm Washers (5 pcs).

STEP 4 - ATTACH DOUBLE POINTED BOLTS TO HEAD ASSEMBLY

Attach M6 x 70 Double Pointed Bolts (3 pcs) and 6mm Washers (3 pcs) to the top of the Head Assembly and tighten the bolts securely (Figure 7).

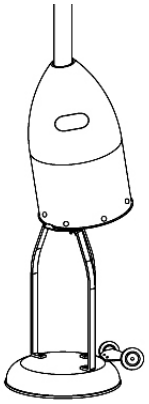

Figure 5 – Attaching cylinder cover.

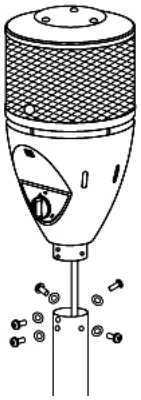

Figure 6 – Attaching head assembly to post.

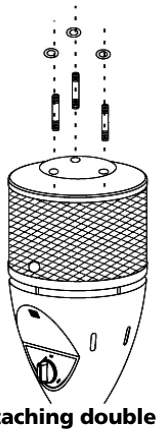

Figure 7 – Attaching double pointed bolts to head assembly.

Dayton® Propane Patio Heaters

Assembly (Continued)

STEP 5 - ASSEMBLY OF REFLECTOR

Attach Reflector Rap to top of reflector (4 pcs) using the M6 x 10mm Bolts (12 pcs), 6mm Washers (12 pcs) and M6 Nuts (12 pcs) as shown in Figure 8.

STEP 6 - ATTACH THE REFLECTOR ASSEMBLY TO TOP OF HEAD ASSEMBLY

Load the Reflector Assembly to the top of the Head Assembly using M6 x 70 Double Pointed Bolts (3 pcs), 6mm Washers (3 pcs) and M6 Nuts (3pcs). (Figure 9).

STEP 7 - CONNECT GAS LINE TO LP CYLINDER

Attach Gas Hose to the Regulator (Figure 10) with 3/8" open end wrench and adjustable wrench. Attach Regulator to LP cylinder. Tighten securely, then move LP cylinder to the plate of the Base assembly.

STEP 8 - CHECK FOR LEAK

Your Patio Heater has been checked at all factory connections for leaks. To check the connection of the Gas Hose / Regulator / LP cylinder:

1. Make leak test solution by mixing 1 part liquid dish soap and 3 parts water.
2. Spoon several drops (or use a squirt bottle) of the solution onto bottle) of the solution onto the Gas Hose / Regulator or the Regulator / LP cylinder connection.

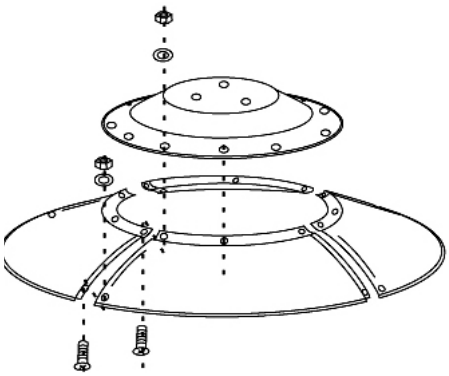

Figure 8 – Attaching reflector to reflector cap.

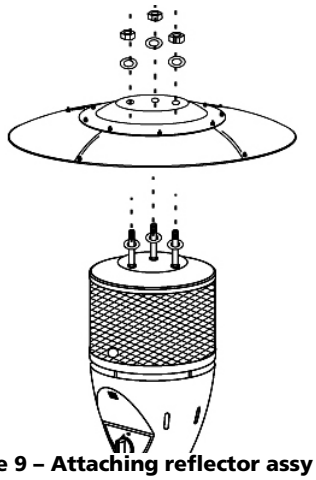

Figure 9 – Attaching reflector assy to head assy

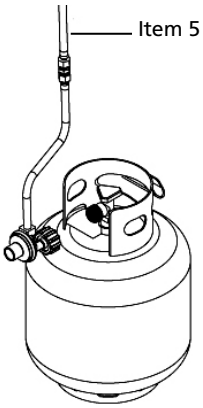

Figure 10 – Connect gas line to LP cylinder

3. Inspect the connections and look for bubbles.
4. If no bubbles appear, the connection is safe.
5. If bubbles appear, then there is a leak. Loosen and re-tighten the connection where bubbles are present.

STEP 9 - LOWER LP CYLINDER COVER ONTO CYLINDER BASE

Lower the LP cylinder cover onto the Cylinder Base.

STEP 10 - DISCONNECT LP CYLINDER WHEN STORING OR TRANSPORTING

Turn off heater and turn off valve on LP cylinder. Disconnect the Regulator and remove LP cylinder.

Operation

Dayton Propane Patio Heaters are designed for the heating of outdoor patios, decks, spas, pool and open working areas.

BEFORE TURNING GAS SUPPLY ON

⚠WARNING ***Your Dayton Propane Patio Heater was designed and approved for OUTDOOR USE ONLY. Do NOT use this heater inside a building, or any enclosed area.***

BEFORE LIGHTING

⚠WARNING ***Heater should be thoroughly inspected before each use, and by a qualified person at least once a year.***

Models 1TGP7, 1TGP8 and 1TGP9

Operation (Continued)

- If relighting a hot heater, wait at least 5 minutes. See Figure 13 for space tolerances.

LIGHTING INSTRUCTIONS

1) Turn the Control Knob to the "OFF" position (Figure 11a).
2) Fully open LP cylinder valve.
3) Push in gas Control Knob and turn counterclockwise to "IGNITE" then to "PILOT" (Figure 11b) to light the pilot. If needed, keep depressing and turning Control Knob counter-clockwise until the pilot lights (You should hear 2 clicking sounds).
4) Once the pilot is lit, continue to depress the Control Knob for 30 seconds.
5) If the pilot does not stay lit, repeat steps 3 and 4.

Figure 11a – Control knob in OFF position

Figure 11b – Control knob in PILOT position

6) If after repeating steps 3 & 4 unit does not light, then
   - Push in Control Knob and turn counterclockwise to "PILOT".
   - As you are depressing theControl Knob, place long stem lighter into the ignition hole (Figure 12) on the Emitter Screen to light the pilot.
   - Repeat step 4.
7) Push in and turn the Control Knob to the "LOW" position, then release Control Knob. If you want a higher temperature, push in the Control Knob and turn counterclockwise to the "HIGH" position.

NOTE: The flame pattern at the Emitter Screen should be visually checked whenever heater is operated. Normally the burner flame is blue, but little yellow flame is acceptable.

If flames extend beyond surface of the Emitter Screen or a black spot is accumulating on the Emitter Screen or reflector, shut off the heater. See Troubleshooting on page 8. Do not operate until heater has been serviced or repaired.

⚠WARNING ***Do NOT touch or move heater for at least 45 minutes after use. Allow Emitter and Reflector to cool before touching.***

⚠WARNING ***If at anytime you are unable to light the burner and smell gas, wait 5 minutes to allow gas to dissipate before attempting to light again.***

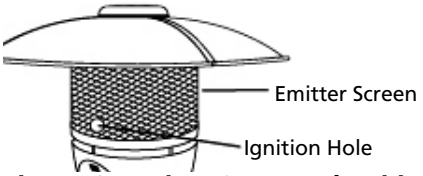

Figure 12 – Emitter Screen and Ignition Hole

AFTER FIRST LIGHTING

- The burner may be noisy when initially turned on. To eliminate excessive noise form the burner, set the Control Knob to "LOW", then turn the Control Knob to heat level desired.
- White smoke may appear around the Emitter Screen during the first few minutes of initial lighting. This is the heater burning up the oil used in manufacturing. Both smoke and odor will dissipate after approximately 30 minutes.

WHEN HEATER IS ON

- The Emitter Screen will become bright red due to the intense heat. Burner may display tongues of blue flame. These flames should not be yellow or produce thick black smoke, which indicates that there is an obstruction of airflow through the burners.
- If flame is very low it is because there is not enough pressure. Check your LP cylinder.

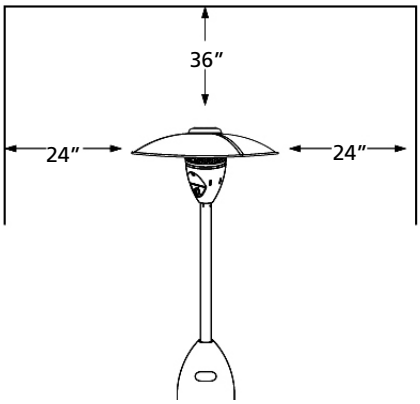

Figure 13 – Space Tolerances

Dayton® Propane Patio Heaters

Operation (Continued)

RELIGHTING

1) Turn the Control Knob to the "OFF" position.
2) Wait at least 5 minutes before attempting to relight the pilot.
3) Repeat steps beginning with step 2 under 'Lighting Instructions'.

SHUT DOWN INSTRUCTIONS

1) Push in and turn Control Knob to the "OFF" position.
2) Turn gas valve on LP cylinder clockwise until tight to close.

⚠WARNING ***Always be sure Control knob is OFF and cylinder is OFF when leaving heater. Never leave this patio heater unattended while in use.***

NOTE: After use, some discoloration of the emitter screen is normal.

⚠DANGER ***Do not touch or move heater during operation or for at least 45 minutes after use. Serious injury or death may occur.***

Maintenance

To enjoy years of performance from your heater be sure to perform the following maintenance activities on a regular basis:

- The flame pattern at the Emitter Screen (Figure 14) should be visually checked whenever the heater is operated. Normally the burner flame is blue, but little yellow flame is acceptable.
- Keep the exterior surfaces clean by using warm soapy water. Never use flammable or corrosive cleaning agents.
- Be SURE to keep the area around the burner and pilot assembly dry at all times. If the gas control is exposed to water in any way, do not try to use it. It may need to be replaced.
- Air flow must be UNOBSTRUCTED. Keep controls, burner and circulating air passageways clean. Signs of possible blockage include:

  1) Gas odor with extreme yellow tipping of flame.

  2) Heater does not reach the desired temperature.

  3) Heater glow is excessively uneven.

  4) Heater makes popping noises.
- Spiders and insects can nest in burner or orafices. This dangerous condition can damage the heater and render it unsafe for use. Clean burner holes by using a heavy-duty pipe cleaner. Compressed air may help clear away smaller particles.
- Carbon deposits may create a fire hazard. Clean dome and emitter with warm soapy water if any carbon deposits develop. - At least ONCE A YEAR check the section of the hose inside the post.

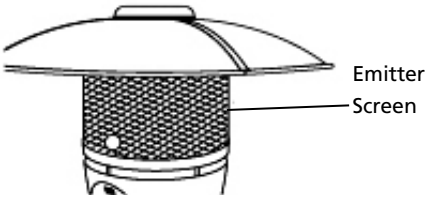

Figure 14 – Emitter Screen Check

- In salt-air environments (such as near an ocean) corrosion occurs more quickly than normal. Frequently check for corroded areas and repair them promptly.

Storage

BETWEEN USES

- Turn Control Knob to OFF position
- Turn control valve on LP cylinder to OFF.
- Store your Patio Heater upright in a dry place that is sheltered from inclement weather such as rain, sleet, hail, snow, dust and debris. DO NOT store Patio Heater indoors with LP cylinder still connected.
- If desired, cover heater to protect exterior surfaces and to help prevent debris in air passageways.

DURING EXTENDED PERIODS OR WHEN TRANSPORTNING

- Turn control knob to OFF position
- Disconnect LP cylinder and move to a well-ventilated location outdoors. Do not store LP cylinder indoors.
- Store your Patio Heater unright in a dry place that is sheltered from inclement weather such as rain, sleet, hail, snow, dust and debris.
- If desired, cover heater to protect exterior surfaces and to help prevent debris in air passageways.

NOTE: Wait until Patio Heater is completely cool before covering.

For Repair Parts, call 1-800-323-0620

24 hours a day – 365 days a year

Please provide following information:
-Model number
-Serial number (if any)
-Part description and number as shown in parts list

Address parts correspondence to:
Grainger Parts
P.O. Box 3074
1657 Shermer Road
Northbrook, IL 60065-3074 U.S.A.

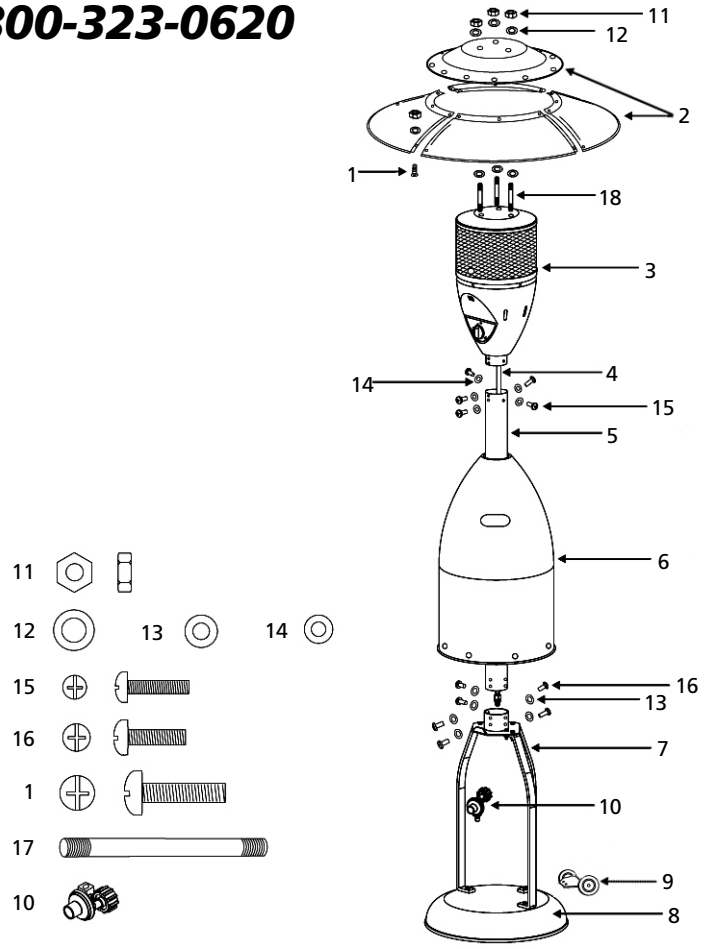

Figure 15 – Exploded Parts Illustration

Repair Parts List for Dayton Propane Patio Heaters

Ref No.	Description	Part Numbers for Model: 1TGP7	1TGP8	1TGP9	Qty
1	M6 x 10 Bolt	HV650010100G	HV650010100G	HV650010100G	12
2	Reflector Assembly	HV650020200G	HV650020200G	HV650020200G	5
3	Head Assembly	HV650030200G	HV650030300G	HV650030100G	1
4	Internal Gas Hose	HV650040100G	HV650040100G	HV650040100G	1
5	Post	HV650050200G	HV650050300G	HV650050100G	1
6	Cylinder Cover	HV650060200G	HV650060300G	HV650060100G	1
7	Post Mounts	HV650070100G	HV650070100G	HV650070100G	3
8	Cylinder Base	HV650080200G	HV650080300G	HV650080100G	1
9	Wheel Assembly	HV650080250G	HV650080350G	HV650080150G	1
10	Regulator	HV650090100G	HV650090100G	HV650090100G	1
11	M6 Nut	HV650100100G	HV650100100G	HV650100100G	15
12	6mm Washer	HV650100200G	HV650100200G	HV650100200G	18
13	5mm Washer	HV650100300G	HV650100300G	HV650100300G	6
14	4mm Washer	HV650100400G	HV650100400G	HV650100400G	5
15	M4 x 8 Bolt	HV650110100G	HV650110100G	HV650110100G	5
16	M5 x 8 Bolt	HV650110200G	HV650110200G	HV650110200G	6
17	M6 x 70 double pointed Bolt	HV650110300G	HV650110300G	HV650110300G	3

Dayton® Propane Patio Heaters

Troubleshooting Chart

Symptom	Possible Cause(s)	Corrective Action
Pilot will not light.	1. Gas valve may be OFF. 2. LP cylinder is empty. 3. Orifice blocked. 4. Air in supply system. 5. Loose connection.	1. Turn the gas valve ON. 2. Refill LP Cylinder. 3. Remove and clean and replace if needed. 4. Purge air from lines. 5. Check all fittings and connections.
Pilot will not stay on.	1. Debris around pilot. 2. Loose connection. 3. Thermocouple is bad. 4. Leak in fuel line. 5. Lack of fuel pressure.	1. Clean pilot area. 2. Tighten connection at the LP cylinder. 3. Replace thermocouple. 4. Check connections. 5. LP cylinder is near empty. Refill LP cylinder.
Burner will not light.	1. Pressure is low. 2. Orifice blocked. 3. Control valve is not ON. 4. Thermocouple is bad. 5. Pilot light assembly is bent or not in the correct location.	1. LP cylinder is near empty. Refill LP cylinder. 2. Remove and clean and replace if needed. 3. Turn valve to ON. 4. Replace thermocouple. 5. Place pilot in proper position and retry.

Notes

Notes

Notes

Dayton® Propane Patio Heaters

LIMITED WARRANTY

DAYTON ONE-YEAR LIMITED WARRANTY. *DAYTON® PROPANE PATIO HEATERS COVERED IN THIS MANUAL, ARE WARRANTED BY DAYTON ELECTRIC MFG. CO. (DAYTON) TO THE ORIGINAL USER AGAINST DEFECTS IN WORKMANSHIP OR MATERIALS UNDER NORMAL USE FOR ONE YEAR AFTER DATE OF PURCHASE. ANY PART WHICH IS DETERMINED TO BE DEFECTIVE IN MATERIAL OR WORKMANSHIP AND RETURNED TO AN AUTHORIZED SERVICE LOCATION, AS DAYTON DESIGNATES, SHIPPING COSTS PREPAID, WILL BE, AS THE EXCLUSIVE REMEDY, REPAIRED OR REPLACED AT DAYTON'S OPTION. FOR LIMITED WARRANTY CLAIM PROCEDURES, SEE "PROMPT DISPOSITION" BELOW. THIS LIMITED WARRANTY GIVES PURCHASERS SPECIFIC LEGAL RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.*

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Product Suitability. *Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While attempts are made to assure that Dayton products comply with such codes, Dayton cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product applications, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.*

Certain aspects of disclaimers are not applicable to consumer products; e.g., (a) some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you; (b) also, some jurisdictions do not allow a limitation on how long an implied warranty lasts, consequently the above limitation may not apply to you; and (c) by law, during the period of this Limited Warranty, any implied warranties of implied merchantability or fitness for a particular purpose applicable to consumer products purchased by consumers, may not be excluded or otherwise disclaimed..

Prompt Disposition. *A good faith effort will be made for prompt correction or other adjustment with respect to any product which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to Dayton at address below, giving dealer's name, address, date, and number of dealer's invoice,and describing the nature of the defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.*

Manufactured for Dayton Electric Mfg. Co., 5959 W. Howard St., Niles, Illinois 60714 U.S.A.